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ABSTRACT

Text, illustrations, and exercises are utilized in this set of three learning modules to inform members of the general public about the causes and treatments of the common medical ailments that they may have. The first module, "Understanding Ligation of Hemorrhoids as an Office Procedure" by Audrey E. Kidd, lists the symptoms of hemorrhoids, discusses the importance of a high fiber diet in their prevention, and describes the treatment of the condition by rubber band ligation. The second module, "Your Bladder Infection (Cystitis)" by Pam Jones, examines the bacterial causes of bladder infection, identifies its symptoms, describes its treatment, and outlines hygienic precautions to be taken in avoiding cystitis. The third module, "You and Your Ulcer" by Martin Quan, explains what a duodenal ulcer is, describes the role of acid production in causing the ulcer, and discusses how antacids, diet, lifestyle, and stress affect ulcer management. Each of the illustrated modules provides sequential reinforcement exercises with immediate feedback throughout the text and concludes with a post-test and accompanying answer key. The time required to complete the modules ranges from 15 to 30 minutes. (JP)

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HEALTH INSTRUCTION PACKAGES:

CONSUMER -- UNDERSTANDING YOUR CONDITION

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UNDERSTANDING LIGATION OF HEMORRHOIDS AS AN OFFICE PROCEDURE

by

Audrey E. Kidd, R.N.

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TITLE OF PACKAGE:	Understanding Ligation of Hemorrhoids as an Office Procedure
AUTHOR:	Audrey E. Kidd, R.N.
INSTITUTION:	Kaiser-Permanente Medical Center Sacramento, California
INTENDED STUDENTS:	Citizens at large
ESTIMATED WORKING TIME:	30 Minutes
MATERIALS NEEDED:	None

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INTRODUCTION

Hemorrhoids have afflicted man since the dawn of history. Human beings, because they walk in an upright position, are particularly prone to increased pressure in their rectal veins. It is among the first conditions described as contributing to the discomfort of humans.

The basic principals of the treatment of hemorrhoids have been remarkedly consistent through history. Ligation, excision, and cautery were used by Hippocrates. Tying off by rubber bands (ligation) has now been accepted as the treatment of choice for internal hemorrhoids.

In 1960, Mayo Clinic reported an incidence of hemorrhoids in 52% of patients examined in their facility.

OBJECTIVES OF UNIT

Overall Objective

Understanding ligation of hemorrhoids as an office procedure

Sub-Objectives

I. State what hemorrhoids are and list the symptoms

II. Describe the importance of proper diet which includes high fiber foods

III. Describe procedure for treatment of hemorrhoids by rubber band ligation in office

PRACTICE EXERCISE #1

Hemorrhoids are dilated veins in the rectal canal, similar to the swelling of veins in the legs called varicose veins. Any condition which irritates this area or which results in increased pressure in the veins of the anal canal may cause hemorrhoids: pregnancy, straining at stool (constipation or diarrhea) or poor dietary habits with lack of fiber in the diet.

PRACTICE QUESTION #1

1) What are hemorrhoids?

2) What are the three main causes of hemorrhoids?

Feedback

I hope you put down:

1) Dilated rectal veins

2) Straining, pregnancy, diet

PRACTICE EXERCISE #2

The principal symptoms of hemorrhoids are pain or itching around the rectum, protrusion or swelling of veins around the rectum, and bleeding. Bleeding is the most frequent symptom of hemorrhoids and pain is next most frequent. Protrusion has three stages:

In the first, the patient has sensation that something is coming out with a bowel movement and going back in after defecation.

The next stage, the patient has to push the hemorrhoid back in after a bowel movement; and finally when it becomes difficult to push in, the patient usually sees a doctor. If prolapsing hemorrhoids are trapped outside, the patient has severe pain and develops a "thrombosed hemorrhoid" which presents as large swollen painful "grapes" which must be opened and the blood clot removed.

PRACTICE QUESTION #2

1) What are the principal symptoms of hemorrhoids?

2) What is a thrombosed hemorrhoid?

Feedback

1) I hope you wrote down pain, swelling and bleeding!

2) Did you remember the painful "grape" that forms when hemorrhoids are trapped outside the rectum?

PRACTICE EXERCISE #3

One of the basic causes of hemorrhoids is lack of natural fiber in the diet. If our diet is lacking in roughage, food does not move along our digestive tract at a healthy speed, and we develop constipation.

About 90% of the items stocked by the average supermarket have had nearly every scrap of roughage removed in the refining or manufacturing process. For example, instant potatoes and rice, cake mixes, pudding, stuffings, and even many cereals have been stripped of dietary fiber. White breads, commercial baked goods and convenience foods containing ultrarefined flour are also low in dietary fiber.

It is essential that we include fresh fruits and vegetables and whole grain breads and cereals in our diet daily. The easiest way to add fiber to our diet is by the addition of unprocessed miller's bran. Bran is relatively cheap and is available at all health foods stores and many supermarkets. A tablespoon of bran added to each meal is a good way to begin, and you can regulate the amount your body needs by your bowel movements.

If you have to strain to eliminate, the amount of bran should be increased. If bowel movements become loose or too frequent, reduce the bran. Bran can be sprinkled over break fast cereals with milk, mixed with cooked cereals, added to fruit juice, mixed with yogurt, added to soup or stews, mixed with applesauce, combined with ground meat, or meat loaf, or added to any home made bread or muffins. It is important to drink at least 2 quarts of liquid per day.

HIGH BULK/HIGH FIBER FOODS

Bran Cereals
Whole Grain Cereals
Whole Grain Bread

FRESH FRUITS

Apples	Bananas
Peaches	Oranges
Pears	Plums

FRESH VEGETABLES

Spinach	Yams	Sweet Potatoes
Beets	Cauliflower	Turnips
Brussels Sprouts	Cabbage	Broccoli
Carrots	Lettuce	Eggplant

To increase your dietary fiber, be sure to eat bran cereal and whole wheat bread daily.

In addition, eat at least two of the fresh fruits and two of the fresh vegetables listed above, each day.

Avoid canned or frozen fruits and vegetables, instant "quick cooking" foods, and convenience type snack foods.

PRACTICE QUESTION #3

1. What is one of the chief causes of hemorrhoids?
2. List as many foods as you can that have natural fiber in them.
3. What is the easiest way to add fiber to your diet?

Feedback

1. I hope you answered "Lack of fiber in diet," because this is one of the biggest problems with the American diet today.

2. All fresh fruits and vegetables and whole grain bread and cereals are full of fiber.

3. Add bran to your foods.

PRACTICE EXERCISE #4

The methods used in treating hemorrhoids are many in number. They may be treated conservatively by warm sitz baths, suppositories, and ointments; by injection of liquids into the veins; by surgical excision of the veins; and by the application of small rubber bands over the hemorrhoids. The bands, being elastic, tighten down and kill the hemorrhoid trapped inside the band. This method destroys hemorrhoids just as if they were cut out with a scalpel. Injections do not actually destroy hemorrhoids.

Internal hemorrhoids are supplied by an entirely different type of nerves from those supplying the very sensitive nerves going to the skin. For this reason, we do not have to use an anesthetic when removing the hemorrhoids.

You will feel and hear a snap or thump as the bands are applied. You will feel a dull ache for about 36 to 48 hours. This will be an ache rather than severe pain. Many like to describe the feeling of discomfort thus, "I feel as though I want to have a bowel movement" or "there seems to be stool in my rectum near the opening." This feeling will be noted as soon as the rubber bands are applied. For this ache or discomfort the great majority of patients take either no medication or a few aspirin tablets. Only one hemorrhoid is treated at one time and the usual course of treatment is three visits at 2 week intervals.

After the treatment, it is important to keep your bowel movements reasonably soft. If you are taking adequate amounts of bran and liquids, nothing else is necessary. For additional softening, if desired, we recommend Metamucil Powder, one teaspoon with a glass of water once or twice a day as necessary.

Straining to have a bowel movement is definitely to be avoided; we do not fear damage to the treated hemorrhoid. Instead, we are anxious to avoid irritation and damage to the hemorrhoids that have not received treatment.

No hospitalization is necessary and you will be able to drive your car immediately after treatment. There is no bowel preparation necessary, no Castor Oil or cleansing enemas, prior to treatment. You may return to work the next day, so there will be no time lost from work.

The dead hemorrhoid will drop off in about 7 to 14 days. You will usually not know this except for the fact that some patients will notice slight bleeding at that time.

Ligation of hemorrhoids in the office is the procedure of choice for treating hemorrhoids. The ligation methods does not require hospitalization or anesthesia and rarely has pain or loss of time from work. Many thousands of hospital bed days are saved for more serious problems and the reduction of pain and expense to the patient has been most gratifying.

Practice Question #4

1) After ligation of hemorrhoids in the office, how long must a person be off work?
2) What type of anesthetic is used?
3) What preparation is necessary for this procedure?
4) What is the treatment of choice for hemorrhoids?

Feedback

1) I hope you remembered that you don't have to lose any time from work.
2) The nicest thing about this procedure is the lack of pain--so no anesthesia is needed.
3) Forget about laxatives and enemas when you keep your ligation appointment--none are needed.
4) The treatment of choice for hemorrhoids is office ligation as many thousands of grateful patients will tell you!

A brief Post-Test follows to check your memory. The answers are on the last page.

POST-TEST

Multiple Choice

1. Hemorrhoids are:

   (a) Infected cysts around rectum
   (b) Dilated veins in the rectal canal
   (c) Boils around the rectum

2. Hemorrhoids are caused by:

   (a) Infection
   (b) Injury
   (c) Constipation or straining at stool, poor dietary habits, pregnancy

3. Symptoms of hemorrhoids are:

   (a) Pain or itching around rectum
   (b) Protrusion or swelling of veins around rectum
   (c) Bleeding
   (d) All of these

4. Foods that have high fiber content are:

   (a) Dairy products
   (b) Fresh fruits and vegetables and whole grain cereals and breads
   (c) Desserts such as pie, cake, and ice cream

5. Too keep stool soft and eliminate straining during bowel movement, it is necessary to drink how many quarts of liquid per day?

   (a) One
   (b) Two
   (c) Three

6. After treatment of hemorrhoids by office ligation, patient is required to stay home from work:

   (a) One week
   (b) No loss of time from work
   (c) Two weeks

7. The anesthetic used in this procedure is:

   (a) General anethetic
   (b) Local anesthetic by injection
   (c) No anesthesia is necessary

POST-TEST (cont.)

8. Preparation for this procedure is:

   (a) Castor oil, 4oz., the evening before
   (b) Cleansing enema the morning of procedure
   (c) No bowel preparation is necessary

9. The treatment of choice for hemorrhoids is:

   (a) Surgery
   (b) Injection of veins
   (c) Rubber band ligation

ANSWERS TO POST-TEST

1. b
2. c
3. d
4. b
5. b
6. b
7. c
8. c
9. c

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YOUR BLADDER INFECTION (CYSTITIS)

By

Pam Jones, R.N.

Betsy Murray, Illustrator

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TITLE OF PACKAGE:	Your Bladder Infection (Cystitis)
AUTHOR:	Pam Jones, R.N. Betsy Murray, Illustrator
INSTITUTION:	North Carolina Memorial Hospital
INTENDED STUDENTS:	Patients with bladder infection
ESTIMATED WORKING TIME:	15 minutes
MATERIALS NEEDED:	None
REVISED:	September 1, 1977

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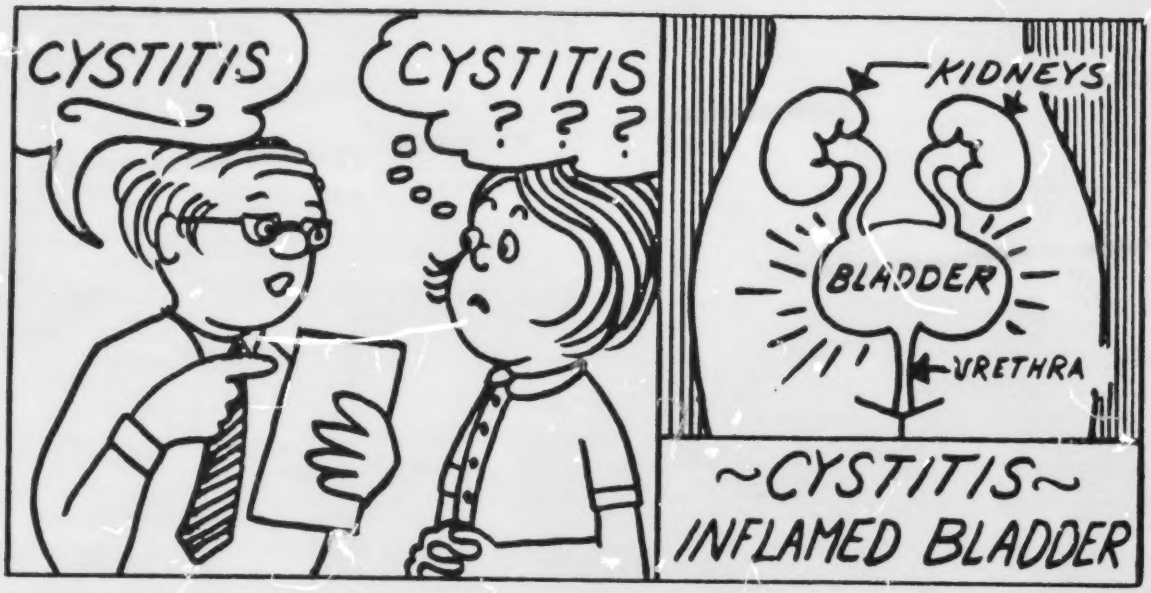


YOUR BLADDER INFECTION

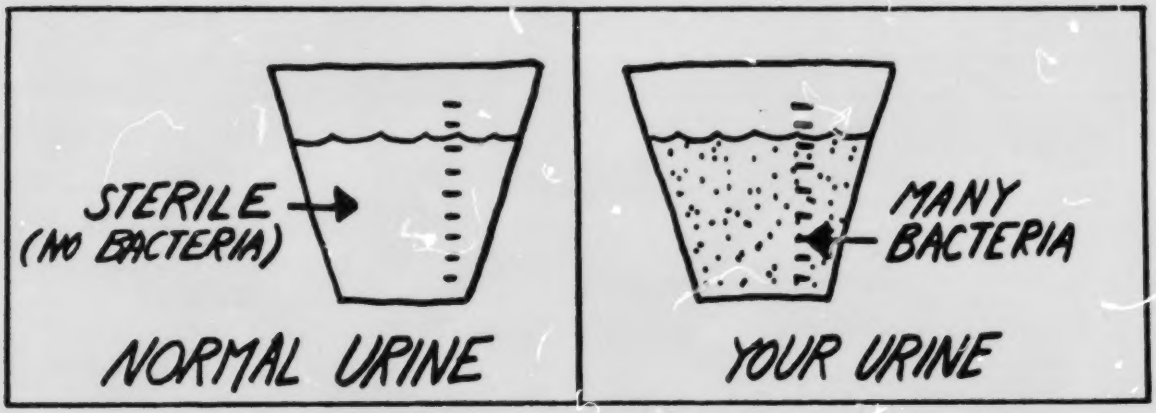
WHAT IS IT?
HOW CAN YOU CURE IT?
HOW CAN YOU PREVENT IT?

You've just been told by the doctor or nurse that the discomfort that brought you to the clinic is the result of a bladder infection.

You have all sorts of questions in your head about what you've been told. You'd like a better understanding of what a bladder infection is and what can be done about it.

This learning package is designed to help you answer those questions.

Cystitis (sis-ti-t'ɪs), meaning inflamed bladder, is the medical term for a bladder infection. It occurs when you have bacteria present in the urine in your bladder. Normally the urine in your bladder is sterile (free of bacteria). When you get bacteria in your urine (bacteriuria) you may feel a lot of discomfort (you probably already know about that!) which we will talk about later.



NOW LETS STOP AND SEE WHAT YOU'VE LEARNED!

1. The medical name for a bladder infection which means inflamed bladder is:

   _____a. bladderitis

   _____b. cystitis

   _____c. tonsilitis

2. A bladder infection occurs when bacteria is present in the urine in your bladder.

   _____True _____False

(1. b-cystitis 2. True)

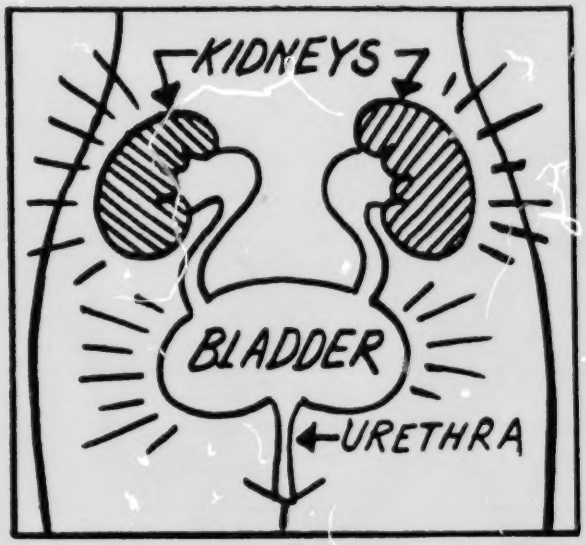
About the discomfort.....

Let's look at some of the symptoms (signs of a disease) that bring many women with cystitis to the doctor (you probably experienced some or all of the following):

A woman may also have fever, chills, or low back pain which may mean that she has an infection in another part of her urinary tract, her kidneys, as well as her bladder.

BEFORE YOU TURN THE PAGE ~ DO YOU KNOW 4 SYMPTOMS THAT MAY INDICATE A BLADDER INFECTION?

The possibility of the spread of a bladder infection to the kidneys is one reason it is important for a woman to get good follow-up after a bladder infection. We'll discuss that later.



A BLADDER INFECTION CAN SPREAD TO YOUR KIDNEYS.

3. From the list of symptoms below, check the ones that may indicate a bladder infection:

_____1. headache

_____2. pain on urination

_____3. hair falling out

_____4. passing small amounts of urine

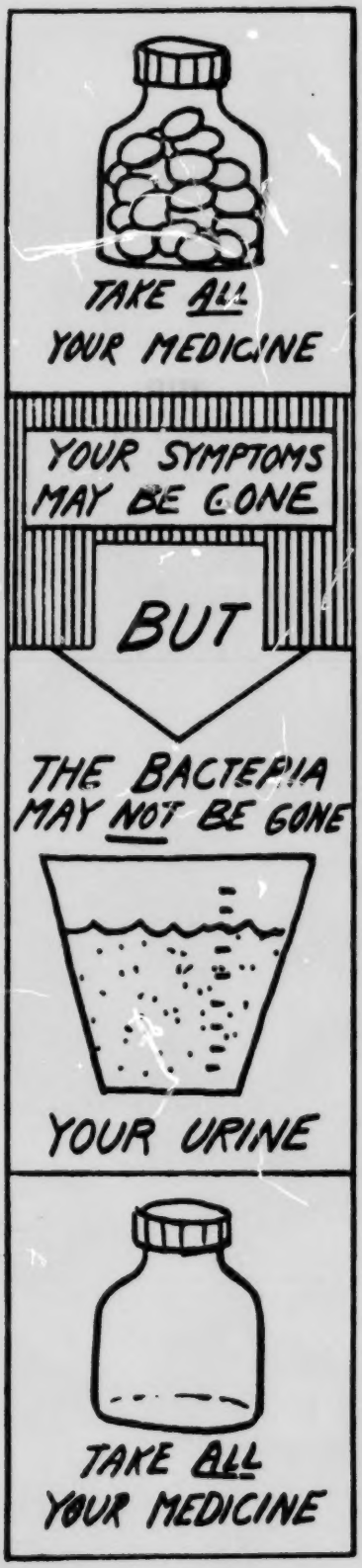
_____5. urinating frequently

_____6. blood in urine

_____7. a sense of needing to urinate NOW

How are you doing? If you checked 2, 4, 5, 6, and 7 you are absolutely right! If not, go back and reread the above material.

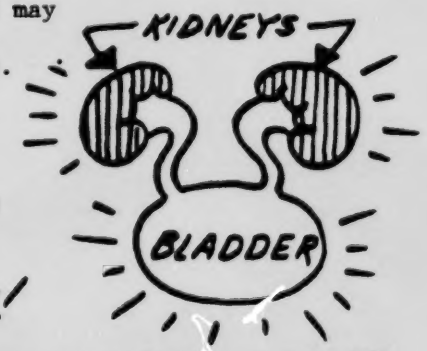
Then continue.....



You may now be wondering about your medicine. You have probably been given an antibacterial drug to destroy the bacteria and make the urine sterile again. You will need to take your medicine for 10 days or longer. But even though the symptoms may be gone, it does not necessarily mean all of the bacteria is gone.

IT'S VERY IMPORTANT THAT YOU TAKE ALL OF YOUR MEDICINE!

If you do not take all of your medicine, your urine may not become completely sterile again, and the bladder infection may come back, or it may spread to your kidneys. A kidney infection is much more difficult to get rid of than a bladder infection and may lead to complications.



FOLLOW-UP IS VERY IMPORTANT!

DON'T LET YOUR INFECTION SPREAD.

You may also be given some medicine called pyridium (PAH-RID-E-UM) to stop the pain until the infection is cleared up. If your urine turns orange, DON'T PANIC. This always happens with this medicine and will not cause any problems. However, it stains your panties and you may want to wear a mini-pad while taking the medicine.

Let's be sure you understand this:

4. The antibacterial drug will destroy the bacteria in your urine.

   _____True _____False

5. You should take:

   _____a. 1/3 of your medicine

   _____b. 1/2 of your medicine.

   _____c. All of your medicine.

6. An untreated bladder infection may lead to which of the following infections:

   _____a. heart

   _____b. ear

   _____c. kidney

7. What color will your urine turn due to your pain medication?

   _____a. green polka dot

   _____b. orange

   _____c. red, white and blue.

Answers: True, the drug will destroy the bacteria or make the urine sterile.
(c) All of your medicine
(c) kidney infection
(b) orange

Did you get them all right? Good! If not, review the material and continue when you can answer all the questions.

You will be asked to return to the clinic after you finish your medicine to have your urine rechecked for bacteria. It is very important that YOU MAKE THE RETURN VISIT!

Some women may have bacteria in their urine without any symptoms until the infection has already spread to the kidneys. Because of this, you should have your regular doctor treat you so he can follow your progress.

If you don't have a regular doctor, this might be a good time to think about getting one. It is better for you if the same doctor sees you for all your health care. If he knows you, your health history and concerns he will be able to treat you better when you get sick!

YOUR RETURN VISIT TO THE CLINIC IS VERY IMPORTANT!

I FEEL FINE NOW. I'M NOT GOING BACK FOR MY RETURN APPOINTMENT.
SYMPTOMS MAY BE GONE ~ WHEN BACTERIA IS STILL THERE!
STOP! DON'T FORGET!

I'll bet I can guess your next question.....

HOW CAN YOU AVOID GETTING A BLADDER INFECTION?

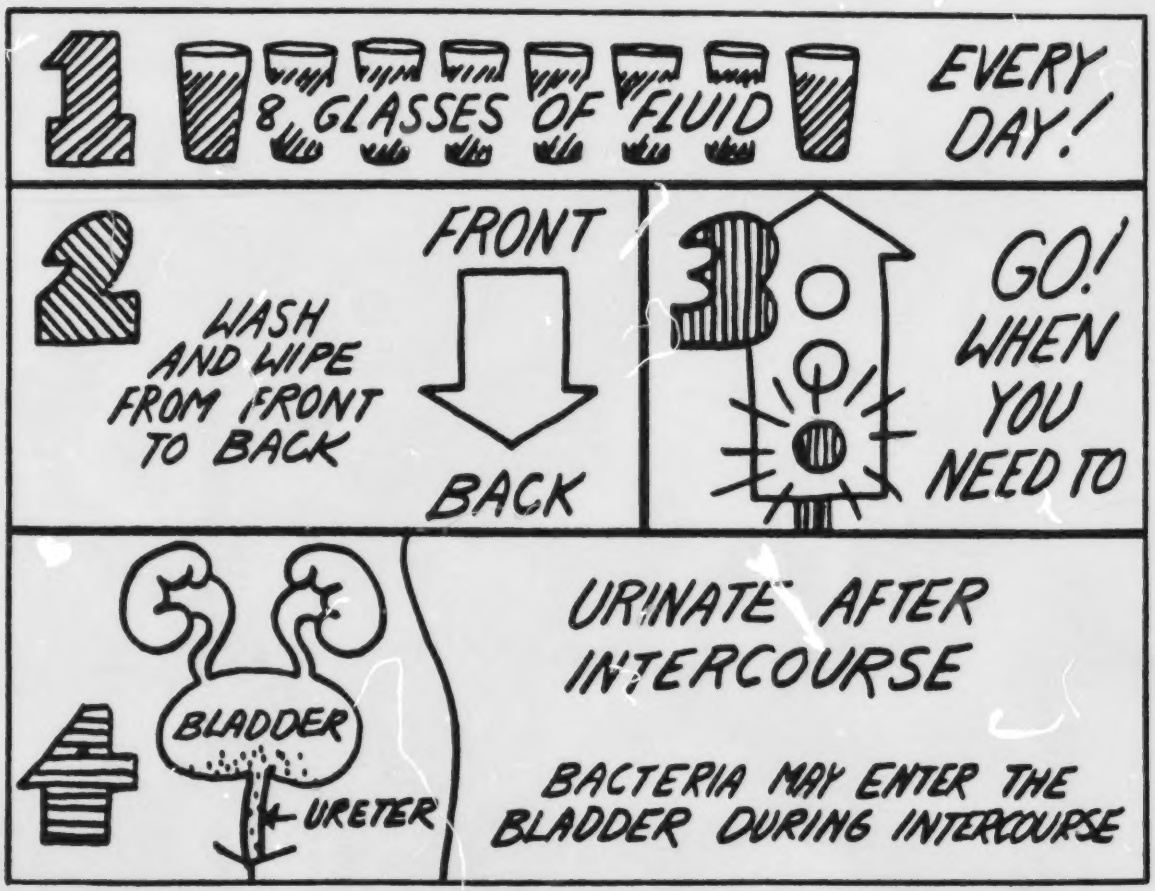
Right? I have four suggestions that won't guarantee you'll never get another bladder infection but definitely lower your chances of getting another.

Drink plenty of fluids every day (at least 8 glasses).

Always wash and wipe yourself from front to back (and of course wash the area around your vagina every day).

Try not to hold your water in your bladder for very long. When you feel a need to urinate do it then. (Doctors now feel that waiting a long time to urinate may cause bacteria to multiply in your bladder.)

Sometime before sexual intercourse, drink some fluid so you can urinate shortly after intercourse. This helps wash out any bacteria that may be introduced into the urethra during intercourse and prevent it from traveling into the bladder and causing infection.



8. Now check the four ways to avoid a bladder infection in the list below:

_____a. Drink water every other day.

_____b. Drink at least 8 glasses of fluid every day.

_____c. Always wash and wipe yourself from front to back.

_____d. Go to the restroom when you feel you have to. Don't wait a long time.

_____e. Urinate shortly after sexual intercourse.

If you checked b, c, d, and e you are absolutely, 100% RIGHT! If you missed any, check over the list again.

REMEMBER: You are the only one who can do the four steps to help you avoid a bladder infection!

Let's REVIEW what you've learned. You now know:

What a bladder infection is.

Some symptoms you can expect if you have one.

How you should follow your doctor's advice and what your medicine will do.

How to avoid future infections.

TEST YOUR KNOWLEDGE:

Take the post test at the end of the package. If you have problems with any of the questions, look up the answer in the booklet. If not, Congratulations! You're finished.

P.S. Please answer the last questions on the test. They will be useful in helping us to improve this booklet for the use of other women like yourself.

THANK YOU!

POST TEST

1. Check 4 symptoms of cystitis (bladder infection):

_____a. Headache

_____b. Burning when urinating

_____c. Blurred vision

_____d. Blood in your urine

_____e. Need to urinate frequently

_____f. Feeling of urgency to urinate.

2. Cystitis is:

_____a. Bacteria in the urine in your bladder causing an infection.

_____b. An island off the coast of Greece.

_____c. A bump on your knee.

3. One of the ways to avoid cystitis is:

_____a. Urinating shortly after intercourse.

_____b. Drinking water once a week.

_____c. Taking aspirin every 4 hours.

4. You should take all your medicine to:

_____a. Get your money's worth.

_____b. Completely get rid of your infection.

_____c. Please your doctor.

5. You should get good follow-up of a bladder infection because:

_____a. It gives the doctor something to do.

_____b. All the bacteria may not be gone and may lead to a kidney infection and further complications.

_____c. It's fun to come to the clinic.

6. I found this package to be:

_____confusing _____helpful _____relevant to me

_____dull _____too easy _____too long

_____not relevant to me _____interesting _____too hard

ANSWERS TO POST TEST

1. Four symptoms of cystitis (bladder infection) include:

   b--burning when urinating
   d--blood in your urine
   e--need to urinate frequently
   f--feeling of urgency to urinate

2. Cystitis is:

   a--bacteria in the urine in your bladder causing an infection.

3. One of the ways to avoid cystitis is:

   a--urinating shortly after intercourse.

4. You should take all your medicine to:

   b--completely get rid of your infection.

5. You should get good follow-up of a bladder infection because:

   b--all the bacteria may not be gone and may lead to a kidney infection and further complications.

ANSWER SHEET FOR PRACTICE QUESTIONS

1. _____ a. _____ b. _____ c.

2. _____ True _____ False

3. _____ 1. _____ 5.
   _____ 2. _____ 6.
   _____ 3. _____ 7.
   _____ 4.

4. _____ True _____ False

5. _____ a. _____ b. _____ c.

6. _____ a. _____ b. _____ c.

7. _____ a. _____ b. _____ c.

8. _____ a. _____ d.
   _____ b. _____ e.
   _____ c.

ANSWER SHEET TO POST-TEST

1. ____ a. ____ d.
   ____ b. ____ e.
   ____ c. ____ f.

2. ____ a.
   ____ b.
   ____ c.

3. ____ a.
   ____ b.
   ____ c.

4. ____ a.
   ____ b.
   ____ c.

5. ____ a.
   ____ b.
   ____ c.

6. ____confusing ____helpful ____relevant to me
   ____dull ____too easy ____too long
   ____not relevant to me ____interesting ____too hard

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YOU AND YOUR ULCER

by

Martin Quan, M.D.

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TITLE:	You and Your Ulcer
AUTHOR:	Martin Quan, M.D.
INSTITUTION:	UCLA Family Practice Center
INTENDED STUDENTS:	Patients
ESTIMATED WORKING TIME:	30 minutes
MATERIALS NEEDED:	None

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INTRODUCTION

So you've been told by your doctor that you have a duodenal ulcer. It is important for you to know what this ulcer is and what caused it. What is even more important, however, is what you can do to manage your own ulcer well.

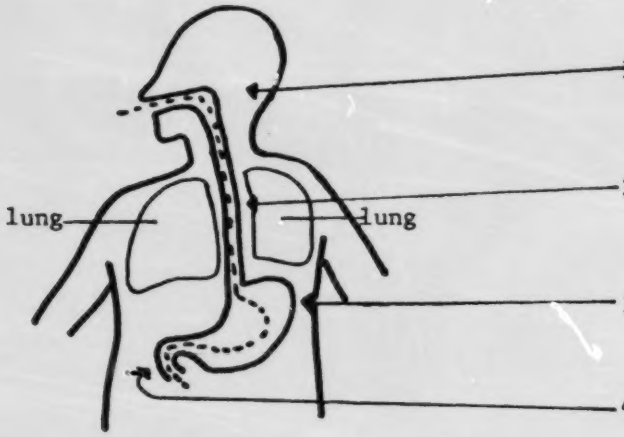
A duodenal ulcer is one of the more common diseases of the digestive system, occurring in roughly 5% of the adult American population. It is a chronic disease that most often can be managed medically without surgical intervention if it is managed properly. Your doctor has told you what you can do to treat your ulcer and now it's up to you.

This learning package is designed to convey to you an understanding of what caused your ulcer and the logic behind the therapy your doctor has prescribed. When you finish this packet you will be able to:

1. Define what a duodenal ulcer is.
2. Explain what causes a duodenal ulcer
3. Explain the role of acid production in the development of your ulcer and what increases its production.
4. Discuss the role of antacids, diet, habits, and emotional stress in the management of your ulcer.

PART I: WHAT IS A DUODENAL ULCER?

To understand what a duodenal ulcer is, it is necessary to know what a duodenum is. The duodenum is the part of the upper digestive tract that immediately follows the stomach. Study the diagram below of the upper digestive system and follow the dotted line to see where food goes after you swallow.



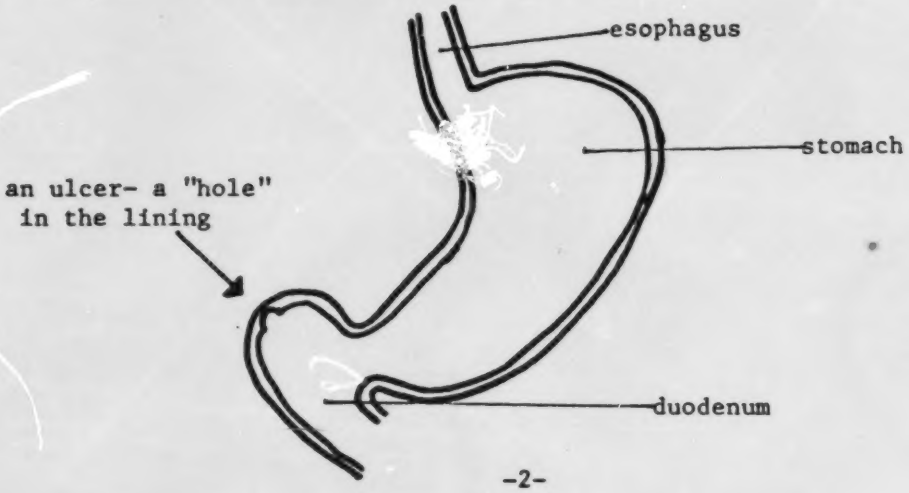
1) Food enters here, into your mouth

2) Down this tube (called the esophagus) through the chest into your abdomen

3) Into your stomach, where acid is produced

4) To the first part of your small intestine. This first part is called the duodenum.

A duodenal ulcer is a deep erosion into the inner lining of your duodenum, that is, a hole into the inner surface. See illustration below:

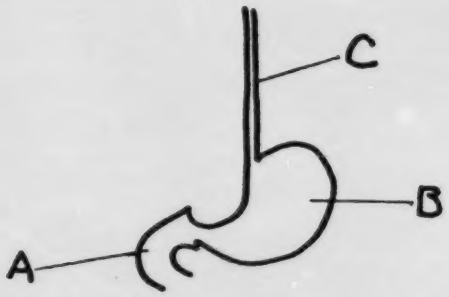


This ulcer in the duodenal wall is caused by acid produced by the stomach, injuring the lining and dissolving a "hole" into the duodenal wall.

Everyone has acid in the stomach and duodenum, so why are you one of the 5% of the people to get an ulcer? The answer is primarily "two-fold": 1) You may have more acid produced by your stomach than most people, 2) the lining of your duodenum for some reason is more sensitive to acid, and thereby less resistant.

STOP! See if you can answer the following questions before proceeding to the next section.

1. Match the letter on the diagram with the proper term



esophagus
stomach
duodenum

2. A duodenal ulcer is (pick the best answer)
   a. A hole in the stomach
   b. A "nervous stomach"
   c. A belly pain that seems to come and go
   d. A hole in the lining of that part of the digestive tract that immediately follows the stomach

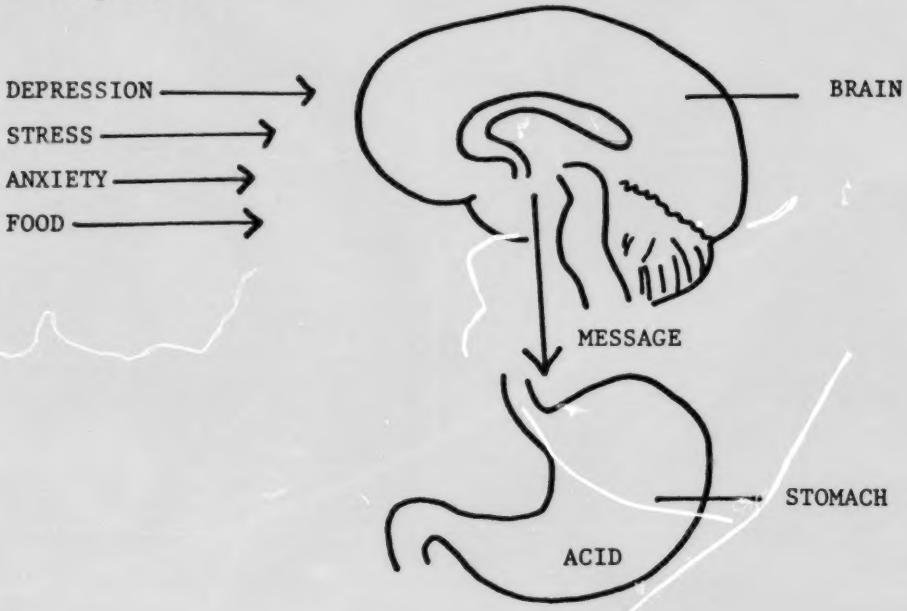
3. Give two reasons why some people get ulcers and others don't.

ANSWERS: 1. A = duodenum, B = stomach, C = esophagus; 2. D; 3. 1) more acid produced and 2) duodenal lining less acid-resistant or more acid-sensitive

PART 2: WHAT CAUSES ACID TO BE PRODUCED AND WHAT PRODUCES THE PAIN OF A DUODENAL ULCER?

There are two major determinants of how much acid is produced by the stomach. Doctors call them the "cephalic phase" and the "gastric phase".

The "cephalic phase" involves messages from your brain traveling down, via nerves, to your stomach and telling your stomach how much acid it should produce. Various parts of your brain are involved in these messages, including the part that reacts and deals with emotions (i.e. depression), anxiety, and stress. Generally, the more anxious and worried you are, the greater amount of acid is produced. The conscious part of your brain is also involved, and the smell and sight of a good meal will also cause acid to be produced.



The "gastric phase" involves the stomach deciding for itself how much acid it will make. This is primarily determined by the type of food you eat and how much you eat. Foods that can increase acid production include coffee, tea, alcohol. Large meals which stretch the stomach more also tend to increase acid production.

The pain of a duodenal ulcer is increased by acid produced by the stomach coming into contact with the ulcer. Generally, the more acid present, the more painful an ulcer is.

Thanks to both the cephalic and gastric phases, approximately one to

three hours after eating a meal marks the period of peak acid production by the stomach. This is why most people experience their ulcer pain approximately two hours after eating.

REVIEW QUESTIONS:

4. Circle the items that would cause your brain to send a message to your stomach to produce more acid:

A. sight of blood	B. anxiety	C. stress
D. depression	E. hot weather	F. running

5. Circle the items that would cause your stomach to produce more acid:

A. alcohol	B. water	C. aspirin
D. cake	E. coffee	F. large meals

6. What chemical causes the pain of an ulcer?

7. How long after eating is the period of peak acid production?

ANSWERS: 4. A, B, C, D; 5. A, E, F; 6. acid; 7. 1-3 hours

PART 3: MEDICAL MANAGEMENT AND YOU

Duodenal ulcer is a chronic disease in that after the initial episode there is a strong predisposition for relapse. Only 10-15% of people with duodenal ulcer do not suffer a relapse after the initial episode has resolved. The other 85% will most likely suffer a relapse within five to ten years of the initial episode.

Medical therapy is directed at relieving the pain of the ulcer, increasing the rate of healing, and decreasing the frequency of relapses. This can be accomplished by:

1. Decreasing the amount of acid in the duodenum by either decreasing the stomach's acid production or by neutralizing the acid produced
2. Avoiding things that can damage the duodenal lining.

With proper management most duodenal ulcers will heal within 4-6 weeks of treatment.

Medical management involves:

1. ANTACIDS. Antacids serve to neutralize the acid produced by the stomach, preventing the acid from irritating your ulcer and delaying its healing. For the first 4-6 weeks they should be taken one and three hours after eating so as to counter the peak acid production that occurs after meals. In addition, they should also be taken at bedtime so as to neutralize acid produced while you're sleeping.

   Although antacid tablets are more convenient, liquid antacid has been shown to be more effective and should be used whenever possible.

   Common side effects of antacids include diarrhea and constipation. Let your doctor know if you are having any problems with this.

   Antacids are important in the healing of your ulcer and are needed even if your pain goes away.

2. DIET AND HABITS. The use of certain foods and drugs is inadvisable for people with ulcers. These agents can either increase acid production or delay healing of your ulcer and therefore should be avoided. The common ones are:

   A. <u>Aspirin</u> - this drug clearly damages your duodenal lining, making it more susceptible to damage by acid. Tylenol is a good substitute for aspirin.

B. Alcohol - this can BOTH damage the duodenal lining and increase acid production. Total abstinence is recommended, especially during the first four to six weeks of therapy.

C. Caffeine - this chemical is found in coffee, tea, and many cola drinks, and is associated with increasing acid production. Suitable substitutes include Sanka and Postum.

D. Smoking - recent studies have shown that smoking inhibits the healing process of duodenal ulcers.

Besides the foods mentioned above, the only other foods to be restricted are those that you feel cause increased ulcer pain for you.

Your diet should consist of three meals a day with as few snacks as possible so as not to add additional peak acid production periods to your day. Bedtime snacks are also a "no no" for it would serve to increase acid production while you're asleep (a time during which you aren't taking antacids).

3. PSYCHIC STRESS. Anxiety, depression, and stresses are all generally associated with a poor response to medical therapy, probably by both increasing acid production and making the duodenal lining more acid-sensitive. If you feel yourself getting "upset" over a situation or if you feel "bombarded" by stress in general, feel free to talk it over with your physician.

PRACTICE QUESTIONS:

8. True or False: Antacids are important in the healing of your ulcer and should be taken as prescribed.

9. True or False: Antacids only decrease the pain of your ulcer and need only be taken when you have pain.

10. Circle the things that may make your ulcer worse:

A. Antacids	D. Coffee	G. 3 meals a day
B. Smoking	E. Tea	H. Bedtime snacks
C. Alcohol	F. Coca cola	I. Aspirin

11. True or False: A person under stress is more likely to develop an ulcer.

ANSWERS:

8. True

9. False

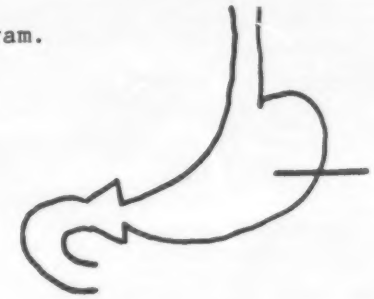
10. B, C, D, E, F, H, I

11. True

Test your memory with the review questions on the next page. The answers are on page 10.

CUMULATIVE REVIEW QUESTIONS

1. Explain what a duodenal ulcer is and show where it would be on the accompanying diagram.



2. Why do some people get ulcers and others don't?

3. What things cause your brain to send a message to your stomach to produce more acid?

4. What things cause your stomach to produce more acid?

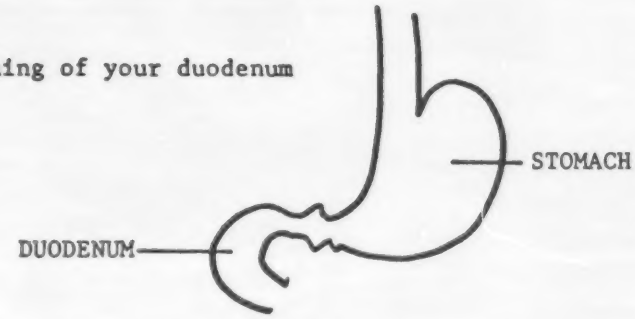
5. What causes the pain of an ulcer?

6. True or False: Antacids relieve the pain of duodenal ulcer and also promote healing so they should be taken as prescribed regardless of symptoms.

7. Describe the importance and objective of medical management by discussing the role of antacids, diet, and habit in the treatment of your duodenal ulcer.

ANSWERS:

1. A duodenal ulcer is a hole in the lining of your duodenum



2. Increased acid production and/or decreased resistance of duodenal lining to acid.

3. Depression, stress, anxiety, sight of food

4. Coffee, tea, alcohol, large meals, cigarettes

5. Acid

6. True, antacids also can help your ulcer heal faster

7. a) Antacids relieve the pain and promote the healing of your ulcer so take them as prescribed by your doctor

   b) Diet

   Aspirin damages your duodenal lining making it more acid sensitive, and should be avoided.

   Alcohol increases acid secretion and damages the lining and should be avoided as much as possible. Discuss and negotiate this with your doctor.

   Smoking inhibits the healing of your ulcer.

   Caffeine, found in coffee, tea, and cola drinks, increases acid production. Substitute a low-caffeine product.

   In-between meals snacks, especially bedtime snacks, should be avoided as they will stimulate unnecessary acid production.

   c) Psychic stress plays a role in the production of duodenal ulcer. Feel free to discuss your psychosocial problems with your doctor.

CONGRATULATIONS! You now know nearly as much about duodenal ulcer as your doctor does. New drugs to treat duodenal ulcer are on the way, but the principles you have learned will remain the same. In a sense, you should be your own "ulcer doctor" and how you live with and manage your ulcer will depend largely on how "good" a doctor you are.

Good luck, doc!

JUL 17 1981

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